

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: BORISSOV, et al. )  
Application No.: ) Group Art Unit: 3752 (parent)  
Filed: ) Examiner: Steven J. Ganey (parent)  
For: SUPERSONIC INJECTOR FOR GASEOUS FUEL ENGINE (AS AMENDED)

Mail Stop PATENT APPLICATION  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

SIR:

The following are included with this Information Disclosure Statement:

- ☒ **A. PTO/SB/08**
- ☐ **B. CERTIFICATION**  
(37 C.F.R. 1.97(c)-before final Office Action or allowance)
- ☐ **C. \$180.00 FEE PAYMENT**  
(37 C.F.R. 1.97(c)-before final Office Action or allowance)
- ☐ **D. \$180.00 PETITION, CERTIFICATION & PETITION FEE PAYMENT**  
(37 C.F.R. 1.97(d)-before issue fee payment)

The following are submitted in the above-identified application in compliance with 37 CFR 1.98:

- ☐ **I.** A copy of each listed U.S. Patent and U.S. Patent application publication [1.98(a)(2)(i)].
- ☒ **II.** A copy of each listed foreign patent and/or published foreign patent application. For each listed foreign patent and/or published foreign patent application [1.98(a)(2)]:
  - ☒ **a)** the English language version or an English translation if not published in English, if available (see PTO-1449)[1.98(a)(3)]; and/or

- ☐ (b) U.S. counterpart patents or English language equivalents of the foreign patents or published foreign patent applications (see PTO-1449); and/or
- ☐ (c) a concise explanation of the relevance of the listed patents, publications or other information (see PTO-1449, foreign search report or other, attached), as it is presently understood by the person signing this disclosure, since no English translation is currently available[1.98(a)(3)].
- ☐ III. A copy of each listed publication, other than published foreign applications. For each listed publication [1.98(a)(2)]:
  - ☐ (a) an English translation, if available, when the original publication is not in the English language (see PTO-1449)[1.98(a)(3)];
  - ☐ (b) a concise explanation of the listed publications (see PTO-1449), as it is presently understood by the person signing this disclosure, since no English translation is currently available [1.98(a)(3)].
- ☐ IV. For any other listed information, a copy of the information or that portion which caused it to be listed (see PTO-1449)[1.98(a)(2)(iii)].
- ☐ V. Each listed U.S. Patent, Publication or other information that was previously cited by or submitted to the Office in a prior application, which application is relied upon for an earlier filing date under 35 U.S.C. § 120 [1.98(d)].
- ☒ VI. Copies of each listed U.S. Patent and U.S. Patent application publication are not being submitted herewith pursuant to a waiver of 37 CFR 1.98(a)(2)(i) by the USPTO on July 11, 2003 for applications filed after June 30, 2003.

This information is submitted in the above-identified application in compliance with 37 C.F.R. 1.97 because:


- ☒ 1. This information disclosure is submitted within three months of the filing date of the application, or before the mailing date of the first office action on the merits of the application [1.97(b)].
- ☐ 2. This information disclosure is submitted before the mailing date of a final action in this application under 1.113[1.97(c)] and the requisite statement or fee is provided (see items 6 or 7 below).
- ☐ 3. This information disclosure is submitted before the mailing date of a notice of allowance under 1.311 [1.97(c)] and the requisite statement or fee is provided (see items 6 or 7 below).

- ☐ 4. This information disclosure is submitted after the mailing date of a final action under 1.113 [1.97(d)] and the requisite statement and fee is provided (see items 6 and 8 below).
- ☐ 5. This information disclosure is submitted after the mailing date of a notice of allowance under 1.311, but before the payment of the issue fee [1.97(d)] and the requisite statement and fee is provided (see items 6 and 8 below).
- ☐ 6. This information disclosure statement is submitted with the statement required for items 2, 3, 4 or 5 above [1.97(c), (d), (e)]:

☐ I, Kurt L. Ehresman, hereby state the following:

- ☐ Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- ☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing this certification after making reasonable inquiry, no item of information contained in this information disclosure was known to any individual designated in 1.56(c) more than three months prior to the filing of this information disclosure statement.
- ☐ 7. This information disclosure statement is submitted with the fee of \$180 set forth in 1.17(p) [see items 2 and 3 above]. Please charge this fee and any other fees associated with this application to Deposit Account No. 50-1059. (Please note, no fee is required for items 2 and 3 above if the Item 6 statement is provided).
- ☐ 8. Please charge this fee and any other fees associated with this application to Deposit Account No. 50-1059.

Respectfully submitted,

  
\_\_\_\_\_  
Kurt L. Ehresman  
Reg. No. 50,758

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 3

**Complete if Known**

Application Number	
Filing Date	
First Named Inventor	BORISSOV, et al.
Art Unit	3752 (parent)
Examiner Name	Ganey (parent)
Attorney Docket Number	21557-0002

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	A	US- 6,518,763	02-11-2003	Sollart, et al.	
	B	US- 6,463,907	10-15-2002	Hiltner, et al.	
	C	US- 6,427,670	08-06-2002	Goto, et al.	
	D	US- 6,409,096	06-25-2002	Podd, et al.	
	E	US- 6,339,437 B1	01-08-2002	Baika, et al.	
	F	US- 6,328,231	12-11-2001	Ording, et al.	
	G	US- 6,196,204	03-06-2001	Janach, et al.	
	H	US- 6,161,783	12-19-2000	Press, et al.	
	I	US- 6,112,513	09-05-2000	Catt, et al.	
	J	US- 6,102,299	08-15-2000	Pace, et al.	
	K	US- 6,089,170	07-18-2000	Conti, et al.	
	L	US- 6,073,862	06-13-2000	Touchette, et al.	
	M	US- 6,035,822	03-14-2000	Suzuki, et al.	
	N	US- 6,026,787	02-22-2000	Sun, et al.	
	O	US- 5,899,194	05-04-1999	Iwatsuku, et al.	
	P	US- 5,887,567	03-30-1999	White, et al.	
	Q	US- 5,878,730	03-09-1999	Williams, et al.	
	R	US- 5,829,418	11-03-1999	Tamura, et al.	
	S	US- 5,820,102	10-13-1998	Borland, et al.	
	T	US- 5,775,289	07-07-1998	Yoshida, et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
	U	JP 60-8456	01-17-1985			
	V	WO 83/00191	01-20-1983	Piper FM Limited		
	W	WO 02/02932 A1	01-10-2002	Orbital Engine Company (Australia) Pty Limited		
	X	JP 55-49566	04-10-1980			
	Y	RU 2155422C1	08-27-2000	Meshchanov Evgenij Vital'evich		
	- Z -	- WO 92/05363	04-02-1992	Lucas Industries Public Limited Company		
	AA	EP 0 420 599 A2	04-03-1991	Canadian Gas Association		
	AB	WO 87/00584	01-29-1987	Orbital Engine Company Proprietary Limited		
	AC	EP 0 370 195 A1	05-30-1990	Allied-Signal, Inc.		

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## Application Number

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First Named Inventor

Art Unit

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	AD	US- 5,787,864	08-04-1998	Collier, et al.	
	AE	US- 5,758,865	06-02-1998	Casey, et al.	
	AF	US- 5,713,336	02-03-1998	King, et al.	
	AG	US- 5,752,481	05-19-1998	Faulkner, et al.	
	AH	US- 5,697,346	12-16-1997	Beck, et al.	
	AI	US- 5,673,673	10-7-1997	Beck, et al.	
	AJ	US- 5,666,923	09-16-1997	Collier, et al.	
	AK	US- 5,639,022	06-17-1997	Yanta, et al.	
	AL	US- 5,630,403	05-20-1997	Venkamo, et al.	
	AM	US- 5,611,316	03-18-1997	Oshima, et al.	
	AN	US- 5,566,712	10-22-1996	White, et al.	
	AO	US- 5,549,083	08-27-1996	Feuling, et al.	
	AP	US- 5,542,392	08-06-1996	Povinger, et al.	
	AQ	US- 5,441,234	08-15-1995	White, et al.	
	AR	US- 5,295,816	03-22-1994	Kobayash, et al.	
	AS	US- 5,285,756	02-15-1994	Squires, et al.	
	AT	US- 5,241,930	09-070-1993	Dupler, et al.	
	AU	US- 5,222,993	06-29-1993	Crane, et al.	
	AV	US- 5,211,145	05-18-1993	Ichikand, et al.	
	AW	US- 5,150,690	09-29-1992	Carter, et al.	

[illegible]

Date Considered

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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	AX	US- 5,054,456	10-08-1991	Rush, II, et al.	
	AY	US- 4,825,828	05-02-1989	Schlunke, et al.	
	AZ	US- 4,383,198	05-10-1983	Hosking, et al.	
	BA	US- 4,341,351	07-27-1982	Miller, et al.	
	BB	US- 4,338,897	07-13-1982	Crumheller, et al.	
	BC	US- 4,094,469	06-13-1978	Waringer, et al.	
	BD	US- 4,006,719	02-08-1977	Kanda, et al.	
	BE	US- 3,628,726	12-21-1971	Johnson, et al.	
	BF	US- 2001/0025892 A1	10-04-2001	McCoy, et al.	
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